

Appl. No. 10/034,697
Amdt. dated November 22, 2004
Reply to Office Action of August 25, 2004

REMARKS

Applicants have carefully reviewed the Office Action dated August 25, 2004. Claims 1-26 remain pending in the application. Claims 1-10 were rejected and claims 11-26 were withdrawn from consideration.

Claim Rejections—35 U.S.C. § 102

Claims 1-3 were rejected under 35 U.S.C. § 102(e) as being anticipated by Ferrera et al. (U.S. Patent No. 6,240,231). Applicant respectfully traverses the rejection.

Ferrera et al. do not disclose a support member comprising a first layer disposed over at least a portion of the outer surface of an inner member, “the first layer including a selectively curable material, the first layer further comprising first and second portions of the selectively curable material; wherein the first portion of the selectively curable material is at least partially cured and the second portion of the selectively curable material is either uncured or cured to a lesser degree than the first portion of the selectively curable material” as claimed in claim 1.

Ferrera et al. disclose a variable stiffness optical fiber shaft where the variable stiffness is produced by extending coaxial layers of a heat shrink polymer over different lengths of the shaft. See the paragraph beginning at column 3, line 7. The shaft may be attached to a hub using an adhesive, such as a UV curable adhesive. See column 3, line 65 through column 4, line 2. Nowhere do Ferrera et al. disclose a selectively curable material having a second portion that is uncured or cured to a lesser degree than a first portion.

The Examiner asserts that Applicant has claimed the catheter shaft in a product-by-process style, an assertion with which Applicant respectfully disagrees. However, whether the words “cured” and “uncured” in claim 1 are treated as verbs or as past participles, the structure claimed remains the same and interpretation of a claim as a product-by-process claim does not

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eviscerate elements of the claimed structure. One must show that the product in a product-by-process claim is the same as or obvious from a product of the prior art to render the claim unpatentable. See *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (citations omitted) and M.P.E.P. § 2113.

Claim 1 claims a selectively curable material having a first portion that is at least partially cured and a second portion that is either uncured or cured to a lesser degree than the first portion. Ferrera et al. do not disclose such a product. Ferrera et al. merely disclose the use of a curable adhesive to adhere the strain relief member to the shaft and then the proximal hub to the strain relief member. A curable material having first and second portions cured to different levels is not inherent in such a disclosure. Only where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, is a prima facie case of either anticipation or obviousness established. See M.P.E.P. § 2112.01. Curable materials may have vastly different properties depending on the level to which they are cured. For example, certain curable epoxies may be liquids or gels when uncured, elastic solids when partially cured, and rigid solids when fully cured. Thus, a disclosure of a UV curable adhesive and "allowing the adhesive to cure" as is in Ferrera et al. does not inherently disclose a selectively curable material having a second portion that is uncured or cured to a lesser degree than a first portion.

Because Ferrera et al. do not disclose each and every element of the claimed invention, Applicant submits that claim 1 is in condition for allowance. As claims 2-3 depend from claim 1 and contain additional elements, Applicant submits that these claims are in condition for allowance as well.

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Claim 1 was rejected under 35 U.S.C. § 102(b) as being anticipated by Soltesz (U.S. Patent No. 5,836,925). Applicant respectfully disagrees and traverses the rejection.

Soltesz discloses a method of manufacturing a variable stiffness catheter where an electrostatic powder coating is applied to a wire or mandrel in a non-uniform manner and then fused to form a layer by passing the wire through a curing oven. The variable flexibility is a result of the thickness of the coating and the materials used in the coating. Nowhere does Soltesz describe selectively curing the coating and nowhere does Soltesz describe a catheter shaft support member including a selectively curable material having a second portion that is either uncured or cured to a lesser degree than a first portion, which is at least partially cured. Applicant thus submits that claim 1 is in condition for allowance over Soltesz.

Claims 1 and 4-6 were rejected under 35 U.S.C. § 102(e) as being anticipated by Derbin et al. (U.S. Patent No. 6,562,021). Applicant respectfully disagrees and traverses the rejection.

Derbin et al. disclose a variable stiffness electrically conductive catheter shaft where the variable stiffness is supplied by layers of heat shrink polymer encapsulating the one or more conductive members. Derbin et al. claim priority to the same parent application as Ferrera et al. and contain no more pertinent disclosure than do Ferrera et al. Therefore, Applicant submits that claim 1 is patentable over Derbin et al. for the same reasons that claim 1 is patentable over Ferrera et al.; neither disclose a selectively curable material having a first portion that is at least partially cured and a second portion that is either uncured or cured to a lesser degree than the first portion. Applicant further submits that claims 4-6 are patentable as they depend from claim 1 and contain additional elements.

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Claims 1-6 were rejected under 35 U.S.C. § 102(b) as being anticipated by Berg et al. (U.S. Patent No. 5,897,537). Applicant respectfully disagrees and traverses the rejection.

Berg et al. disclose a variable stiffness catheter, where the variable stiffness is created by removing material along one or more lengths and replacing it with a different material. Berg et al. disclose a filler material which may include flexible adhesives such as urethane oligomer/methacrylate monomer blends which can be ultraviolet curable. However, the catheter shaft support member of claim 1 is not inherent in this disclosure; Berg et al. do not disclose a selectively curable material having a first portion that is at least partially cured and a second portion that is either uncured or cured to a lesser degree than the first portion.

Applicant therefore submits that claim 1 is in condition for allowance. As claims 2-6 depend from claim 1 and contain additional elements, Applicant submits that these claims are in condition for allowance as well.

Claim Rejections—35 U.S.C. § 103

Claims 7-10 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ferrera et al., Derbin et al., Berg et al., or Soltesz.

As discussed above, none of these patents disclose the element of claim 1 of a selectively curable material having a first portion that is at least partially cured and second portion that is either uncured or cured to a lesser degree than the first portion. As claims 7-10 depend from claim 1 and contain additional elements, Applicant submits that these claims are in condition for allowance.

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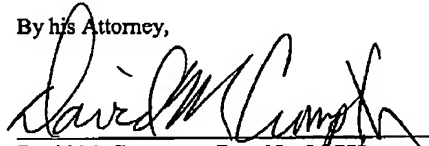
Reexamination and reconsideration are respectfully requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

Henry J. Pepin

By his Attorney,

Date: 11/22/04



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